In response to the Office letter mailed on June 19, 2001, please amend the claims as follows:

8. (Amended) A synthetic peptide comprising a sequence of the human epithelial mucin MUC1 wherein the peptide comprises the sequence, PDTRPAP, the immunodominant sequence, which is glycosylated at the threonine residue.

9. (Amended) The peptide of claim 8, wherein said synthetic peptide has a length of at least about 20 amino acids.

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10. (Amended) The peptide of claim 8, wherein the glycosylation of the threonine of the PDTRPAP is a monosaccharide.

11. (Amended) The peptide of claim 8, wherein the glycosylation of the threonine of the PDTRPAP is a α-N-acetylgalactosamine (GalNAc).

12. (Amended) The peptide of claim 8, wherein the glycosylation of the threonine of the PDTRPAP is an oligosaccharide.

13. (Amended) The peptide of claim 8, wherein the glycosylation of the threonine of the PDTRPAP is the disaccharide Galβ-1,3-GalNAcα.

[Please cancel claim 14 and add the following new claims:]

15. The peptide of claim 9, wherein the glycosylation of the threonine of the PDTRPAP is a monosaccharide.

C4

16. The peptide of claim 9, wherein the glycosylation of the threonine of the PDTRPAP is a α-N-acetylgalactosamine (GalNAc).

17. The peptide of claim 9, wherein the glycosylation of the threonine of the PDTRPAP is an oligosaccharide.

18. The peptide of claim 9, wherein the glycosylation of the threonine of the PDTRPAP is the disaccharide Galβ-1,3-GalNAcα.

19. A tumor vaccine comprising at least one of the synthetic peptides of claim 8 in a pharmaceutically acceptable formulation.

20. A tumor vaccine comprising at least one of the synthetic peptides of claim 9 in a pharmaceutically acceptable formulation.

21. A process for combating tumor cells of MUC1 positive carcinomas in a human which comprises administering a therapeutically effective amount of at least one of the peptides of claim 8 in a pharmaceutically acceptable formulation.

22. A process for combating tumor cells of MUC1 positive carcinomas in a human which comprises administering a therapeutically effective amount of at least one of the peptides of claim 9 in a pharmaceutically acceptable formulation.

23. A process for immunizing a human against a mammary, colorectal or pancreatic carcinoma which comprises administering a therapeutically effective amount of at least one of the peptides of claim 8 in a pharmaceutically acceptable formulation.

24. A process for immunizing a human against a mammary, colorectal or pancreatic carcinoma which comprises administering a therapeutically effective amount of at least one of the peptides of claim 9 in a pharmaceutically acceptable formulation.